

**SAP® Certified**  
Powered by SAP NetWeaver®



## NLINK MES TO SAP SOLUTION

The *NLINK® MES to SAP® Solution* is an integrated product created specifically to address the pressing need for seamless, real-time and ISA-95 standards-based integration between today's Manufacturing Execution Systems (MES) and SAP.



The *NLINK MES to SAP Solution* allows manufacturers to quickly and easily connect any MES that supports exchanging data using the ISA-95 / B2MML standard over a web services interface. Junot Systems has pre-built a set of SAP transactions built on B2MML and covering the functional requirements of Production Management, Asset Management, Inventory Management and Quality Data Management. Simply select the B2MML interfaces that your project needs to support and let the *NLINK MES to SAP Solution* take care of communicating with SAP. The *NLINK MES to SAP Solution* supports every major version of SAP R/3 and mySAP, requires nothing to be installed into the SAP landscape and requires no additional SAP components or modules to be purchased. The *NLINK MES to SAP Solution* does not require any other SAP components such as NetWeaver, MII or SAP PO (PI) to be present but will work well with them if they are.

Free yourself from proprietary, point-to-point interfaces and embrace the ISA-95 / B2MML standards.



## Background

The *NLINK MES to SAP Solution* solves the problem of how to exchange information between SAP and Manufacturing Execution Systems. Synchronization of these systems has been important for some time but previous approaches have had many drawbacks:

- They were not built upon open standards like ISA 95 / B2MML.
- They had to be implemented via custom coding.
- They were implemented as simplistic point-to-point interfaces.
- They were expensive to migrate when upgraded to support new releases of SAP R/3, SAP ECC and SAP S/4HANA.
- They were not SAP certified.
- They were not reliable, scalable, flexible or manageable.

These many drawbacks meant that integration between Manufacturing Execution Systems and SAP was either not attempted at all or implemented and maintained at an unacceptably high cost.

Despite the lack of any available cost-effective solutions, recipes, bill-of-materials, production orders, schedules, procedures, and specifications still need to be passed from SAP to production management systems. Production conditions and events, materials actually used, product quality measurements, and maintenance information collected in operations still have to be passed to SAP in order to improve enterprise planning, operations documentation, and reconciliation. If this exchange of data is performed manually, and not automated, it is a slow, costly and error prone process.

Now more than ever, companies need to know in real-time exactly what is happening in production so that they can minimize the impact of exceptions and plan accordingly. The *NLINK MES to SAP Solution* allows them to do this quickly, easily and more cost-effectively than was previously possible.



## NLINK MES to SAP Solution Benefits

The *NLINK MES to SAP Solution* provides significant advantages over alternative approaches:

- **Standards Based.** The *NLINK MES to SAP Solution* requires no custom coding to integrate plant level data with SAP. The solution is customized to meet the particular needs of each deployment and nothing needs to be installed into the SAP landscape.
- **Fast to Implement, Easy to Change.** The *NLINK MES to SAP Solution* requires no custom coding to integrate plant level data with SAP. The solution is customized to meet the particular needs of each deployment and nothing needs to be installed into the SAP landscape.
- **Field Proven.** The NLINK technology has been awarded several patents and is a mature, field-proven integration product deployed throughout the world since 1998. It is a reliable, scalable, flexible and manageable enterprise class addition to any IT infrastructure.
- **No Risk.** Junot Systems does not just provide its patented integration technology, it also provides its customers direct access to its staff of SAP functional experts to help collect, refine and validate project requirements. When necessary, these functional experts make use of Junot's in-house SAP systems to provide whatever consulting support that may be needed.
- **Future Proof.** Junot Systems guarantees to keep the installed NLINK MES to SAP Solution technology compatible with any new SAP releases or upgrades and any changes to the ISA 95 / B2MML specifications.
- **SAP Certified.** NLINK has been continuously SAP Certified since 1999 and has been awarded both the Certified for SAP NetWeaver® and Powered by SAP NetWeaver designations.
- **Reliable.** The *NLINK MES to SAP Solution* provides built-in critical transactional support not seen in other approaches, including:
  - **Store and Forward.** When the SAP system becomes unavailable, the *NLINK MES to SAP Solution* stores messages locally and then automatically submits them once, and only once, in the correct order to the SAP system when connectivity is re-established.
  - **Automatic Failover.** If the *NLINK MES to SAP Solution* computer becomes unavailable, or has failed due to hardware or operating system software problems, an optional backup system can be configured to handle its workload until the failed system is brought back online.



- **Scalable.** The *NLINK MES to SAP Solution* provides unparalleled performance and scalability through a number of features, including:
  - **Replication.** Use replication to reduce unnecessary round-trip requests to the back end SAP system, improving overall system response time, reducing network traffic and system load.
  - **Validation.** All MES transactions support centralized validation prior to posting to the SAP system. Many potential errors can be caught prior to posting, reducing the load on the back end ERP.
  - **Multi-Threading.** The *NLINK MES to SAP Solution* is fully multi-threaded. It is able to efficiently handle many requests from many plant level devices simultaneous and process them concurrently.
  - **Memory Resident.** *NLINK's* patented technology uses an extremely powerful and flexible memory-resident database to allow efficient and timely data processing.
- **Flexible.** The *NLINK MES to SAP Solution* offers complete flexibility straight out of the box:
  - **Expandable.** Unlike other approaches, the *NLINK MES to SAP Solution* is a full Enterprise Application Integration (EAI) product. It can be expanded to include connections to legacy systems, best of breed applications, the Internet, and more.
  - **Business Rules.** The *NLINK MES to SAP Solution* provides more than just message delivery. It allows the user to build business logic into any transaction. Business logic is easily configured and changed for evolving business requirements, without programming.
  - **Data Combination.** The *NLINK MES to SAP Solution* lets you easily combine and manipulate data from multiple sources and supports long running transactions.
  - **Scheduler.** In addition to processing transactions in an event-driven manner, transactions can also be batched or scheduled to be posted to SAP periodically.

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